

United States
Department of
Agriculture

June 13, 2005

VETERINARY SERVICES MEMORANDUM NO. 580.18

Animal and Plant Health Inspection Service

SUBJECT: Policy to Ensure the Protection of Personnel Involved in Highly

Pathogenic Avian Influenza Control and Eradication Activities

Veterinary Services

VS Management Team (VSMT)

Directors, VS

Washington, DC 20250

I. PURPOSE

TO:

This memorandum specifies VS policy to ensure the safety of personnel engaged in highly pathogenic avian influenza (HPAI) control and eradication activities. The policy is based on the degree of risk known to be associated with various levels and types of exposures to HPAI viruses and should be considered complementary to avian disease control and eradication strategies as determined by State government, industry, or the United States Department of Agriculture (USDA).

II. BACKGROUND

Avian influenza (AI) is a contagious viral infection or disease of many avian species including poultry, wild and exotic birds, ratites, shorebirds, and migratory waterfowl. HPAI is seen primarily in poultry (rarely in other birds) and is characterized by severe depression, a decrease in egg production, high mortality, edema, hemorrhage, and necrosis.

Avian influenza viruses may be defined as highly pathogenic based either on mortality rates in chickens following intravenous inoculations or on the amino acid sequence at the hemagglutinin cleavage site. Only those results confirmed as HPAI by the NVSL in Ames, Iowa will be considered highly pathogenic.

Although HPAI viruses rarely infect humans, since 1997 instances of human infection have occurred outside the United States—some resulting in death. Transmission to humans is thought to be caused by contact with infected poultry or contact with virus-contaminated surfaces followed by self-inoculation of the virus into the eyes, nose, or mouth. Other means of transmission are possible, such as the virus becoming aerosolized and entering a person's mouth, nose, eyes, or via inhalation into the lungs.

III. GENERAL

Please ensure that all personnel involved in an HPAI response understand and comply with this policy.

VS personnel involved in activities to control and eradicate any HPAI virus among poultry in the United States should read, understand, and follow Attachment 1 entitled: "Veterinary Services Guidance for Protecting Workers against Highly Pathogenic Avian Influenza." This document was adapted from the Occupational Safety and Health Administration publications "Guidance for Protecting Workers Against Avian Flu"

(http://www.ocho.gov/deg/guidenge/gvian.flu.html) and "Avian Influenza." Protecting

(http://www.osha.gov/dsg/guidance/avian-flu.html) and "Avian Influenza – Protecting Poultry Workers at Risk" (http://www.osha.gov/dts/shib/shib121304.html).

Personnel should also review the Centers for Disease Control and Prevention's interim guidance documents regarding protecting personnel involved in controlling and eradicating avian influenza in U.S. poultry. These guidance documents, "Interim Recommendations for Persons with Possible Exposure to Avian Influenza During Outbreaks Among Poultry in the United States" and "Interim Guidance for Protection of Persons Involved in U.S. Avian Influenza Outbreak Disease Control and Eradication Activities" are available on-line at http://www.cdc.gov/flu/avian/professional/protect-guid.htm, respectively.

Questions about this policy or the specific instructions detailed below should be directed to VS Emergency Management (EM) staff. EM staff can be reached during regular business hours Monday-Friday (8 a.m. to 5 p.m. Eastern Time) at 301-734-8073 or toll free at 800-940-6524.

IV. SPECIFIC INSTRUCTIONS

This policy is based on what is currently deemed optimal precautions to protect individuals from illness and the risk of viral reassortment (i.e., mixing of genes from human and avian viruses) while they are involved in the response to a HPAI outbreak.

Personnel involved in HPAI control and eradication activities on known affected or potentially affected premises are at increased risk for exposure to HPAI virus because those personnel frequently have prolonged and direct contact with infected birds and/or contaminated surfaces in an enclosed setting.

To mitigate the risk of exposure or infection, all personnel involved in such activities must follow the precautions specified in Attachment 1. Among other topics, the attachment includes recommendations about personal protective equipment, vaccination with the seasonal influenza vaccine, administration of antiviral drugs for prophylaxis, surveillance and monitoring of workers, and evaluation of workers who develop a febrile respiratory illness within 7 days of their last exposure to infected birds or contaminated surfaces.

John Clifford

Deputy Administrator

Veterinary Services

Attachment

Attachment 1 - "VS Guidance for Protecting Workers against Highly Pathogenic Avian Influenza"

Veterinary Services' Guidance for Protecting Workers against Highly Pathogenic Avian Influenza

GUIDANCE FOR POULTRY WORKERS AT RISK

Highly pathogenic avian influenza (HPAI) is a highly contagious disease of poultry. Despite the uncertainties, poultry experts agree that immediate culling of infected and exposed birds is the first line of defense to both reduce further losses in the agricultural sector and to protect human health. However, culling must be carried out in a way that protects workers from exposures to highly pathogenic avian influenza viruses and therefore reduce the likelihood of infection, illness or viral reassortment.

Exposure to infected poultry, feces, respiratory secretions, and contact with contaminated surfaces is thought to result in transmission of virus to humans and subsequent infection; however, this is a rare occurrence. Although there is evidence of limited person-to-person spread of HPAI virus infection, sustained and efficient human-to-human transmission has not been identified.

The following summarizes recommendations for protecting workers at risk developed by the Centers for Disease Control and Prevention, the World Health Organization, and the Occupational Safety and Health Administration. Personnel involved in HPAI control and eradication activities must take these precautions.

- 1. All persons who have been in contact with poultry, feces, respiratory secretions, or contact with contaminated surfaces should wash their hands frequently. Hand hygiene should also be performed immediately after gloves are removed and should consist of washing with soap and water for 15-20 seconds or the use of other standard hand-disinfection procedures as specified by state government, industry, or USDA outbreak-response guidelines.
- 2. All workers involved in the culling, transport, or disposal of HPAI virus-infected poultry should be provided with appropriate personal protective equipment:
 - Protective clothing capable of being disinfected or disposed, preferably coveralls (plus an impermeable apron) or surgical gowns with long cuffed sleeves (plus an impermeable apron);
 - Gloves capable of being disinfected or disposed; gloves should be carefully removed and discarded or disinfected and hands should be thoroughly washed. Gloves should be changed if torn or otherwise damaged;
 - Respirators: the minimum recommendation is a disposable particulate respirator (e.g., N95, N99 or N100) used as part of a comprehensive respiratory protection program. The elements of such a program are described in 29 CFR 1910.134. Workers shall be medically cleared and fit tested for the model and size respirator they wear and be trained to fitcheck the seal of the facepiece to the face at a minimum;

- Eye protection (e.g. goggles);
- Boots or protective foot covers that can be disinfected or disposed.
- 3. Environmental clean up should be carried out in areas of culling, using the same protective measures as in items 1 and 2, above.
- 4. Unvaccinated workers should immediately receive the current season's influenza virus vaccine to reduce the possibility of dual infection with avian and human influenza viruses.
- 5. Workers should receive an influenza antiviral drug daily (that is approved for use as prophylaxis), for the duration of time during which direct contact with poultry, their secretions, or contact with contaminated surfaces occurs and continuing 5-7 days after the last day of potential virus exposure. Antivirals should be administered in combination with the influenza vaccine (as mentioned above). The choice of antiviral drug should be based on sensitivity testing when possible. In the absence of sensitivity testing, a neuraminidase inhibitor (e.g. oseltamivir) is the first drug of choice since the likelihood is smaller that the virus will be resistant to this class of antiviral drugs that to amantadine or rimantidine.
- 6. Potentially exposed workers should monitor their health for the development of fever, respiratory symptoms, and/or conjunctivitis (i.e., eye infections) for 1 week after last exposure to HPAI virus-infected or exposed birds or to potentially contaminated environmental surfaces. Individuals who become ill should seek prompt medical care and give notification prior to arrival at the health care provider that they may have been exposed to HPAI virus.
- 7. It is important to take measures to prevent the virus from being spread to other areas. To do this, disposable items of personal protective equipment should be discarded properly, and non- disposable items should be cleaned and disinfected according to outbreak-response guidelines.
- 8. To prevent the possible risk of transmission of HPAI virus to their contacts, especially household members, ill persons should practice good respiratory and hand hygiene to lower the risk of tranmission of virus to others. For more information, visit CDC's "Cover Your Cough" website: www.cdc.gov/flu/protect/covercough.htm.
- 9. Patients or health care providers that wish to report possible cases of zoonotic transmission of highly pathogenic avian influenza should consult with their local or State Department of Health.

GUIDANCE FOR VETERINARY LABORATORY WORKERS

Highly pathogenic avian influenza A viruses are classified as "select agents" and must be handled under Biosafety Level (BSL) 3 enhanced or BSL 3-Agriculture laboratory standards. These include controlled access, double door entry with change room and shower out, use of respirators when working with specimens outside a biological safety cabinet, and decontamination of all wastes. Laboratories working on these viruses must be USDA-approved.

Clinical specimens from suspect HPAI virus cases may be tested by polymerase chain reaction (PCR) assays using standard BSL 2 work practices in a Class II biological safety cabinet. In addition, commercial antigen detection testing can be conducted under BSL 2 levels to test for influenza viruses.

All employers processing biologic specimens suspected of being infected with HPAI virus must ensure that their employees comply with all provisions of 29 CFR 1910.1030 for employee protection against bloodborne pathogens, including the reporting of accidental exposure to avian influenza virus. Any accidental exposure should be reported to an immediate supervisor or employee health department.

Additional Sources of Information on Avian Influenza

Centers for Disease Control and Prevention, http://www.cdc.gov/flu/avian/index.htm

U.S. Department of Agriculture, Animal and Plant Health inspection Service, http://www.aphis.usda.gov/lpa/issues/ai-us/ai-us/html

World Health Organization, "Avian influenza – fact sheet" http://www.who.int/csr/disease/avian influenza/en/

World Health Organization, "Avian influenza frequently asked questions" http://www.who.int/csr/disease/avian influenza/avian faqs/en/

APHIS Medical Surveillance Service Form 29 and How to Complete http://www.aphis.usda.gov/mrpbs/forms/aphisforms.html